

Appl. No. 09/777,989  
Atty. Docket No. 8035M  
Amdt. dated 25 November, 2005  
Reply to Office Action of 25 May, 2005  
Customer No. 27752

#### AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph beginning at page 8, line 4, with the following amended paragraph:

#### **"BRIEF DESCRIPTION OF THE DRAWINGS**

Figure 1 is a schematic diagram of an analytical-scale HPLC system in the prior art.

Figure 2 is a flow diagram of the procedure to develop an HPLC protocol.

Figure 3 is a flow diagram of the preferred method for modeling an HPLC system.

Figure 4a is a flow diagram of the a portion of a modified time segmented numerical estimation of peak width and retention time.

Figure 4b is a flow diagram of a portion of a modified time segmented numerical estimation of peak width and retention time that is continued from Figure 4a.

Figure 5 is a flow diagram of the method for performing a multivariate optimization.

Figure 6 is a computer structure in the prior art that can be used to implement this invention."

Please replace the paragraph beginning at page 9, line 17 with the following amended paragraph:

"Figures 4a and 4b represents a preferred method for predicting retention times and peak widths for solute peaks in a sample 400. First, the time to deliver the sample to the column inlet from the injector is calculated. The amount by which a solute peak broadens during this time is also calculated 405. See J.C. Giddings, Unified Separation Science, John Wiley & Sons, Inc. New York (1991). Time segmented numerical analyses then commence. The chromatographic process is divided into short time intervals called segments 410. In the first time segment, mobile phase strength, contribution to broadening of each solute peak, and distance the peak travels are calculated. The contribution to broadening is combined with the peak width calculated previously for the

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extra-column volume (i.e., between the injector where the sample is introduced into the system and the inlet of the HPLC column), and corrected for peak compression by a mobile phase gradient, if present, to give the accumulated peak width 415."

Please add the following new paragraph after the paragraph beginning at page 1, line 8:

" CROSS REFERENCE

This Application claims priority under Title 35, United States Code §119(e) from Provisional Application Serial No. 60/196,184, filed April 11, 2000."